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NOTES ON GEOGRAPHIC DISTRIBUTION

Pleurodema bibroni Tschudi, 1838 (Anura: Leiuperidae): Distribution extension and first record for the state of Paraná, Brazil

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ABSTRACT: *Pleurodema bibroni* is a leiuperid frog known from open habitats in Uruguay and Southern Brazil. This paper provides the first record from state of Paraná, Brazil, and extends the distribution of the species approximately 250 km northwest from the nearest record. The specimen was found in Refúgio de Vida Silvestre dos Campos de Palmas, a federal reserve in southwestern Paraná state created to protect the grasslands, and represents an important record, since the species is considered to be Near Threatened according to IUCN criteria.

Pleurodema bibroni is a leiuperid frog that occurs from southern Uruguay to northeastern Rio Grande do Sul, Brazil, inhabiting coastal sand plains, open savannas, rocky outcrops, grasslands and open mountainous habitats (Langone 1995; Silvano *et al*. 2004; Lema and Martins 2011). The northernmost record is Vacaria (28°31′19.02 ″ S, 50°56′37″ W), Rio Grande do Sul state (Braun 1973; Lema and Martins 2011). Kolenc *et al.* (2011) recognized that some specimens collected in northeastern Paraguay in 1893-1894, previously identified as *Physalaemus fuscomaculatus* (Cei, 1990), were in fact *P. bibroni,* but no data of the habitat or the record localities were provided, and recent records from that country are unknown.

According to IUCN criteria, *P. bibroni* is considered as a Near Threatened species of natural rarity due to habitat destruction by cultivation of crops, establishment of pine plantations, and encroaching human settlements (Silvano *et al.* 2004). In Uruguay, *P. bibroni* was an abundant species until the early 1980s, but now it is considered to be in decline (Kolenc *et al.* 2012). In Rio Grande do Sul, the species was cited as "under protection" in the Floresta Nacional de São Francisco de Paula, in the northeastern part of that state.

During a field trip on October 12, 2012 at the Refúgio de Vida Silvestre dos Campos de Palmas, municipality of Palmas, state of Paraná (26°34′12,31″ S, 51°53′45″ W), one

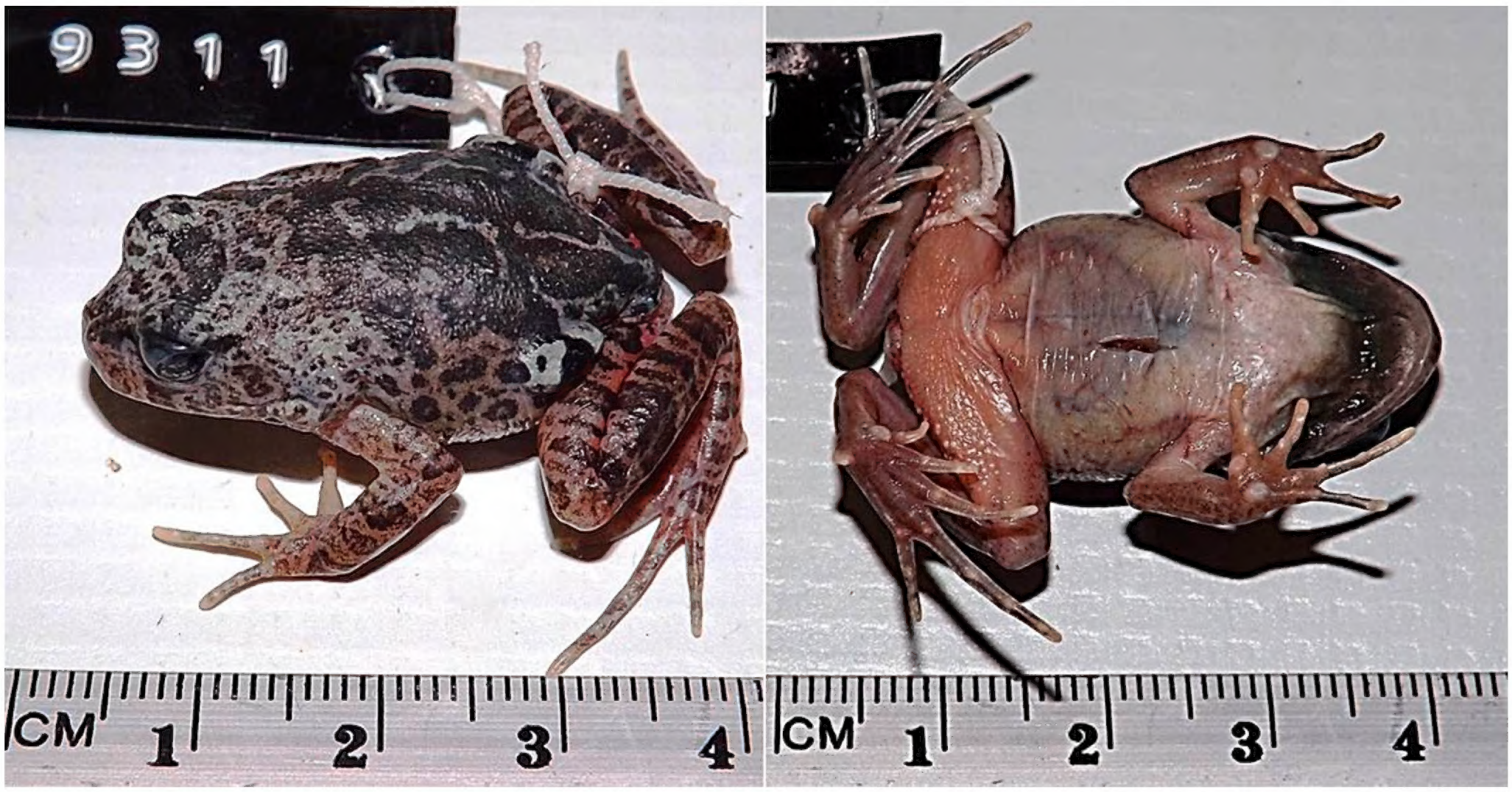

FIGURE 1. Dorsal and ventral view of *Pleurodema bibroni* (Amphibia, Anura, Leiuperidae) collected in Refúgio de Vida Silvestre dos Campos de Palmas, Palmas, state of Paraná, Brazil (MHNCI.9311). Photo by S.A.A. Morato.

specimen of *P. bibroni* (Figure 1) was found at 10:40PM on the ground near an artificial pond in a grassland area. This frog was collected (collection permits SISBIO 10500) and deposited in the herpetological collection of the Museu de História Natural Capão da Imbuia, municipality of Curitiba, Paraná. The specimen (MHNCI.9311; male, 34.8 mm snout-vent length) presentes the typical conspicuous lumbar black glands (Barrio, 1977; Kolenc *et al.* 2009; Lema and Martins, 2011). It was the only individual of that species found in the locality above mentioned. This is the first record of *P. bibroni* from the state of Paraná, Brazil, and extends the known range ca. 250 km towards northwest.

Based on morphological studies presented by Camargo *et al.* (2005), Machado and Maltchik (2007) and Natale and Maneyro (2008) the Uruguayan and Brazilian populations of *P. bibroni* are distinct, and according Lema and Martins (2011) may represent different species, since the slopes of Serra Geral impose a natural barrier between them, a supposition which needs to be verified. Nevertheless, it is believed that the population recorded in southern Paraná must be more closely related to the populations from Northeastern Rio Grande do Sul, since the habitats are similar and typical of the Araucaria plateau (mixed grasslands/araucaria forests). However, the recognized identity of the grasslands in the Palmas region (*Campos de Palmas* - Maack, 1981) in relation to other regional open formations suggests the occurrence of an isolated population of *P. bibroni*. Further research is required in order to elucidate its taxonomic status. Hence, field research on grassland areas in the central region of the state of Santa Catarina are strongly recommended as well.

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